



**BOEING**  
1959 Annual Report





AIR FRANCE



AIR-INDIA INTERNATIONAL



AMERICAN AIRLINES



BRANIFF INTERNATIONAL AIRWAYS



BRITISH OVERSEAS AIRWAYS CORP.



CONTINENTAL AIR LINES



IRISH AIR LINES



LUFTHANSA GERMAN AIRLINES



MILITARY AIR TRANSPORT SERVICE



PAN AMERICAN WORLD AIRWAYS



QANTAS EMPIRE AIRWAYS



SABENA BELGIAN WORLD AIRLINES



SOUTH AFRICAN AIRWAYS



TRANS WORLD AIRLINES



UNITED AIR LINES




VARIG AIRLINES OF BRAZIL



WESTERN AIRLINES



Customer Airlines of Ten Nations Now Fly and Plan  
Boeing Jet Services on Routes Circling the World



# 1959 Annual Report

***BOEING AIRPLANE COMPANY***

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# Highlights

## Operating Summary

	1959	1958
Sales.....	\$1,612,152,754	\$1,711,929,576
Earnings before taxes on income.....	\$25,835,754	\$61,560,013
Taxes on income.....	\$13,400,000	\$32,200,000
Net earnings.....	\$12,435,754	\$29,360,013
Dividends paid.....	\$7,360,826	\$7,016,727
Net earnings per share.....	\$1.65	\$3.93
Dividends paid per share.....	\$0.98	\$0.94
Percentage of earnings before taxes on income to sales.....	1.60%	3.60%
Percentage of taxes on income to sales...	0.83%	1.88%
Percentage of net earnings to sales.....	0.77%	1.72%

## Position at Year End

Working capital.....	\$199,389,650	\$190,317,861
Ratio of current assets to current liabilities	1.63 to 1	1.57 to 1
Stockholders' investment.....	\$208,480,602	\$201,215,137
Number of shares outstanding.....	7,521,911	7,320,006
Stockholders' equity per share.....	\$27.72	\$26.95
Backlog.....	\$2,000,000,000	\$2,445,000,000

## General Information

Total wages and salaries.....	\$563,747,207	\$548,720,343
Average number of employees.....	90,280	92,878
Gross additions to plant and equipment..	\$17,515,758	\$16,782,060

1958 per share figures adjusted to reflect the 2% stock dividend issued December 17, 1959.



## Review of the Year

### TO THE STOCKHOLDERS:

The Boeing Airplane Company entered 1960 — its 45th year of operation — with five major military programs in progress and delivery of commercial 707 jet airliners on schedule.

During 1959, sales of \$1,612,152,754 produced net earnings of \$12,435,754, equivalent to \$1.65 per share of common stock. The sales figures were slightly lower than those for 1958. Net earnings were substantially lower than in 1958, with the second half of 1959 showing an improvement over the first two quarters of the year. It is expected that earnings in 1960 will improve, but the degree of improvement will depend in large measure on developments with respect to the commercial jet transport program.

The B-52 global bomber, KC-135 jet tanker-transport, and Bomarc pilotless aircraft programs accounted for the major portion of military sales during the year. The preliminary defense budget for the fiscal year 1960-61 includes projected figures of \$370 million for B-52H procurement, \$225 million for KC-135s and \$420 million for Bomarc. It should be noted that such figures, which are subject to congressional study and approval, are for overall program expenditures and include amounts for work not assigned to Boeing. Including other projects, such as Minuteman, the total proposed for programs in which Boeing participates indicates sub-

Memento in lights is left by a test missile as it rises from launching pad and accelerates to supersonic speeds



stantial sales potential for the company through the 1961-62 time period.

During the year the company delivered 73 commercial 707 aircraft to airlines, and three military VC-137s. American Airlines and Air India each have signed for one additional 707 and an order was received from United Airlines for 7 additional 720s, bringing its total order to 18. Three 720s were sold to Irish International Airlines, and Lufthansa German Airlines announced its decision to purchase four of these medium range transports and an additional 707. Western Airlines also has made an announcement that it will buy three 720s.

The company during the year offered for sale an all-jet cargo airplane, the Model 735, based on the 707 Intercontinental configuration. To supplement further the Boeing "family of jets", design studies and exploration of market potential continued in the shorter range jet transport field.

Good progress was made on the Minuteman Intercontinental Ballistic Missile program, with a series of tethered test firings proving basic concepts of the missile and the launching method. In addition to its primary responsibility for weapon system integration on Minuteman, the company, during the year, was given added responsibility for development of the launch and communication control system and the mobility concept.

An outstanding new business development during 1959 was the selection of Boeing to manage the Dyna-Soar program. Dyna-Soar is an

Air Force boost-glide vehicle to operate in and out of the earth's atmosphere. The importance of Dyna-Soar goes far beyond its immediate sales volume, for it presents an opportunity in a new field of promising potential.

Accelerating technological advancement and the attendant change in defense concepts has necessitated constant reappraisal by the Department of Defense of weapon systems currently in production and under development. Such reappraisal, coupled with fund limitations and the inherent high cost of today's weapons, resulted in the cutback or complete cancellation of certain of the country's major defense programs in 1959. For Boeing, this meant loss of a multi-million dollar subcontract for building of the B-70 supersonic bomber wings and a reduction in the KC-135 jet tanker-transport program.

Overall company employment declined by some twenty thousand during the year. At year-end the payroll was approximately eighty thousand. It is expected to remain relatively stable throughout 1960.

While no major factory expansions were undertaken during the year, it was necessary to expend approximately \$17 million for property, plant and equipment. Much of this went for laboratories, offices and equipment.

In keeping with its desire for further product diversification, the company late in 1959 began negotiations for the purchase of the Vertol Aircraft Corporation. Vertol specializes in the development and production of helicopters, and also is engaged in research and development on other types of vertical take-off and short take-off length aircraft. The Board of Directors of each company and Vertol stockholders have approved a plan of acquisition which contemplates completion of the transaction by March 31, 1960.



MANTRAC: Course of invading aircraft is plotted on plexiglass map in new Boeing ground control for air defense



# Aero-Space Division

To improve management, technological talent and facilities for advanced projects, the company combined the former Seattle and Pilotless Aircraft Divisions and the Systems Management Office into the Aero-Space Division. Its responsibilities include the current Dyna-Soar, Minuteman and Bomarc programs, with further diversification planned.

In addition to its Seattle operations the Aero-Space Division conducts activities at Ed-

wards Air Force Base, California; Cape Canaveral and Eglin Air Force Base, Florida, and the newly authorized Minuteman facility at Hill Air Force Base, Utah.

Selection of Boeing for principal responsibilities in the Dyna-Soar program was announced by the Air Force late in the year. Earlier, two teams of companies—one headed by Boeing—held competitive first-phase developmental contracts for Dyna-Soar. Four months after these





contracts ended Boeing was advised that it would have responsibility for the vehicle and integration of the vehicle and components with the booster rocket.

Dyna-Soar is to be a manned boost-glide vehicle, operating both in and out of the earth's atmosphere and returning to a normal landing. Speeds will reach orbital; and the man in the vehicle will exercise aerodynamic control during the portions of his flight within the atmosphere.

At year's end, plans for Dyna-Soar were being developed with the Air Force's Wright Air Development Division, Dayton, Ohio. This military organization is the systems manager.

Of the various production programs within the division, Bomarc is the largest from the standpoint of both manpower and dollar volume. The Bomarc A model, currently in production, has a range of approximately 250 miles. A single Bomarc base can provide effective air defense for an area of 196,000 square miles. The A model uses a liquid propellant for initial take-off boost and climb to an altitude and velocity where its twin ramjet engines take over.

The IM-99B, or Super-Bomarc, now in service test production, uses a solid fuel rocket for its initial climb. With advanced ramjet engines and an improved guidance system, it can range some 400 miles for interception. Both Bomarcs can be guided through the SAGE correlated ground control system from remote control points, or through a company developed system known as MANTRAC. A self-contained target seeker guides the missile toward destructive intercept with an invading aircraft or missile.

Bomarc bases in the United States were in various stages of construction at year-end. Boeing is responsible for overall design of the bases and their facilities, including installation and calibration of weapon system equipment.

Following selection of Bomarc by the Canadian government as one of its principal defense

weapons, several other foreign countries have developed an interest in Bomarc.

Tethered test firings of full-scale Minuteman missile models at Edwards Air Force Base, California, accomplished their objectives and demonstrated the soundness of the Minuteman concept. The program was on schedule at year-end, proceeding toward flight testing of the actual weapon at Cape Canaveral. Designed for firing either from fixed bases or from mobile vehicles, Minuteman, in the expressed view of Air Force Chief of Staff General Thomas White, will represent one of the most effective and economical deterrents to international aggression.

Boeing is one of several associate contractors in the Minuteman program for the Ballistic Missile Division of the U. S. Air Force. The company's primary responsibility is for assembly and test of the weapon. Additionally Boeing is responsible for development of the launch control system and the mobility concept. The company has also been selected by the Air Force to begin operation of a Minuteman assembly and recycle facility at Hill Air Force Base, Utah.

Fund limitations, competition for those funds among military advocates of specific missile programs, and technical difficulties inherent in highly sophisticated weapons result in uncertainties and problems common to all missile programs. The Aero-Space programs are no exception. However, the inclusion in the preliminary defense budget for 1960-61 of substantial sums for Bomarc, Minuteman and Dyna-Soar is indicative of the importance with which these programs are regarded.

The Aero-Space Division during the year experienced a trend common to most of the space-aviation industry; an increase in the numbers of scientists and highly skilled technicians employed, coupled with a steady decrease in production employment. This trend was also reflected in facilities; more demand for labora-



tories and office space, less for fabrication and assembly areas. Overall employment in the division declined by approximately 5,000 during the year, and currently is at the 37,000 level.

In keeping with its objective of further diversification, the division continued to seek new business in the fields of manned and unmanned aircraft, in anti-submarine warfare equipment, and in missilery and space exploration.



Bomarcrs at missile production center in Seattle receive detailed inspections





# Transport Division

The Boeing family of commercial 707 jet airliners, products of the Transport Division, revolutionized air travel during 1959, carrying more than 2,000,000 passengers on routes encircling the world and breaking all previous trans-Atlantic, trans-Pacific and transcontinental airliner speed records in 44,000,000 miles of scheduled flying.

The focus of public attention on the Boeing jets was climaxed by President Eisenhower's historic visits to Asia, Africa and Europe. The Presidential tour, like the previous visit of Vice-President Nixon to Moscow and Premier Khrushchev's tour of the United States, exhibited Boeing-built VC-137s (the Air Force version of the 707 transport) across the world. On some trips, VC-137s carried officials, and commercial 707s, leased from airlines, permitted press representatives and staff members to keep up with the jet-paced tours.

In commercial service, the Boeing jets proved immediately popular, with load factors at unprecedented high figures. American, Trans World, Continental and Braniff airlines had 707s in service on U. S. domestic routes at the beginning of 1960; while Pan American, TWA and Qantas were operating on international routes circling the world. Air France and Sabena had accepted deliveries of their first aircraft. By January of 1960, a Boeing jet in commercial service was taking off or landing, somewhere in the world, every five minutes on the average. More Boeings were in airline service in the non-communist world than all other civilian jet airliners combined.

First of the new intermediate-range 720s came off the production line in November. Deutsche Lufthansa and Western Airlines became the fourth and fifth airlines respectively to

order the 720 models. Previous sales had been made to United, American and Irish International Air Lines.

While public acceptance of the Boeing jet transports is enthusiastic and the airlines are highly pleased with the performance and demonstrated earning capabilities of the aircraft, the company has sustained a very substantial loss on the orders received to date. Further, the company is constantly improving its product by incorporating latest advances in the state of the art. In this connection, a number of design improvements developed over the past two years for advanced versions of the Boeing 707 and 720 series of jet airliners are being incorporated in all 707s now in service, as well as those currently in production. Such changes represent further refinements in the handling characteristics of the 707 and 720 and provide a base for further growth in performance and gross weight capabilities as new engines become available.

Further, competition for additional orders for jet transports has become increasingly keen. It is not limited to performance of the respective aircraft and basic price, but has been extended to include as well the financing of equipment purchases, the taking of used equipment as trade-ins, and in some instances a combination of the two.

Future sales prospects are therefore the key to recovery and in this connection authoritative forecasts of free world passenger traffic predict well over a three-fold growth in the period 1958-1970. Converted into airplanes, this means a market for about 1800 small, medium and large turbine airplanes, with an aggregate sales value of approximately seven billion dollars. At the same time studies for the next decade predict a ten-fold increase in the free world's commercial air cargo traffic, as well as substantial requirements for military jet cargo aircraft.



With long and medium range jet aircraft already in production, the division is engaged in detailed studies on a shorter-range transport. In addition, late in 1959, the company offered an all-cargo jetliner, the model 735, designed to reduce air freight costs to compete with surface transportation for many types of cargo. The 735 is projected to carry 50 tons of cargo across the nation in five hours at a direct operating cost of approximately three cents a ton mile. Using proved components of the 707 family and turbofan engines, the plane could be placed in service in 1963.

The company is aggressively pursuing, on a world-wide basis, its sales efforts and is determined to obtain a significant share of the predicted free world market for passenger and cargo jet aircraft.

The turbofan engine, newest development in jet propulsion, was offered on both cargo and passenger models for future delivery. This engine will provide increased performance and permit shorter take-offs. American Airlines ordered retrofit of turbofans for its entire fleet of Boeing jet transports, and several other airlines specified them for future deliveries.





Substantial research effort has been directed toward a supersonic transport which could have both commercial and military applications. This would be a large, long-range vehicle to cruise at from two to three times the speed of sound. The company recognizes, however, the exceptional technical and financial problems involved and continues to predict that extensive use of such supersonic transports is a number of years away.

Meanwhile the military tanker-transport program continues on schedule as one of the company's most successful endeavors. The first KC-135 flew in 1956; in December, 1959, the 347th was delivered to the Air Force. Additional firm contract orders at hand and inclusion in the fiscal 1960-61 proposed budget of funds for an additional 72 KC-135s would extend the production program well into 1962. Long-term planning carries the KC-135 still further into the future—well into the mid-60's. Modification and maintenance of KC-135 airplanes was continued at the Moses Lake Flight Center during 1959. Current programs are on schedule with favorable cost trends indicated.

With Air Force cooperation, numerous developmental studies have been and are being

made of complete military systems which would utilize the basic KC-135 as the airframe component, and which would broaden the military applications of the aircraft. These applications include Electronic Reconnaissance, Weather Reconnaissance, Airborne Early Warning and use as an Airborne Missile Range Station.

In service with the Strategic Air Command as teammates of the B-52 bombers, KC-135s have flown more than 100,000 hours and have made more than 30,000 refueling contacts. They have established official payload, speed and non-stop distance records.

While on-schedule production on both military and commercial programs was maintained, employment was reduced some ten thousand to a year-end level of approximately twenty thousand. The reduction resulted from the normal production improvement on a continuing quantity program, and from concerted efforts to reduce costs.

Effective January 1, 1960, J. O. Yeasting, formerly vice president-finance, was named vice president-general manager of the Transport Division at Renton.







Air routes around the world were pioneered by Boeing jet airliners in 1959. Photo on opposite page was taken in Morocco when President Eisenhower arrived in Air Force Boeing which took him to many nations. Survey flights in preparation for airline operations also took Boeings to Brussels (opposite page), Paris (above), Rome (below, left), and various other cities. Lower right shows Boeing officials at end of a record flight





## Wichita Division

Principal product of the Wichita Division in 1959 was the B-52G eight-jet bomber and missile launching platform. These bombers are fitted to carry air-to-ground missiles as well as regular bomb loads. Launched in the air, the missiles can propel themselves with extreme accuracy to targets several hundred miles beyond the launching point. Not only is the effective hitting range of the B-52 substantially increased, it also can hit several targets on a single mission.

Concurrent with on-schedule production during the year, the B-52 progressed to the H

series in a remarkable demonstration of design flexibility and inherent growth potential. Turbo-fan powerplants to be incorporated in the H model will increase the B-52 range and give a 30 per cent boost in take-off thrust. During 1960, first models of the H series will be phased into the present B-52G production lines.

Funds for procurement of 62 of the new planes were approved by Congress in 1959. Additional B-52H bombers are projected in the preliminary defense budget for 1960-61.

Continuous product growth which has





Contrails of the big bombers—B-52s—  
marked the skies of the free world  
while air crews maintained alerts

characterized the B-52 program since 1952 will continue, although details of improvements under study are classified.

The division also conducts a variety of other activities, the most important being in-plant and field modification of Air Force planes, primarily B-52s. This is the procedure by which earlier-produced planes are brought up to latest standards. During the past year field modification was accomplished by teams totaling 1800 employees, operating at some 12 different Strategic Air Command bases.

Seeking further diversification, the Wichita Division continues active research and development, particularly in the areas of carrier-based weapons for the Navy and in the field of new utility air vehicles for both commercial and military use. The division is placing increased emphasis on its technical and scientific advancement, and as in other divisions, the ratio of engineering and technical skills to production manpower is steadily increasing.

Employment at the end of 1959 was slightly over 22,000, compared to 26,000 at the beginning of the year. This was expected to drop to about 20,000 by the Spring of 1960, and to remain at that level for the balance of the year.

At the year's end, C. B. Gracey, formerly vice president-operations in the company headquarters at Seattle, was named vice president-general manager of the Wichita Division.

The tested B-52 became a platform for missiles with addition of the air-to-ground Hound Dog to its armament







## Industrial

Success in selling the Boeing gas turbine in a competitive market was a major achievement of the Division in 1959. By year-end more than 175 turbines had been sold to commercial airlines to provide ground support at major airports in all parts of the world.

The division broadened its marketing organization during the year in order to place increased effort on a growing number of sales programs.

Engines of the 502 series have achieved more than 95,000 hours of service in various Navy installations, and others of the same series have been in service test with heavy equipment

manufacturers for more than two years. An advanced model was scheduled for flight-testing in a light aircraft in 1960.

First flight test of the model 520 engine—suitable for executive aircraft and small helicopters—was expected in mid-1960, with production engines to be available early in 1961.

The division, which has approximately 1250 employees, also manufactures gearboxes and produces precision aluminum castings for 707s, KC-135s and Bomarc missiles.

Frank Korsberg, formerly acting general manager of the division, was named general manager at the beginning of 1960.

Finely engineered Boeing gas turbines  
powered turbo-starters for jet planes  
at the world's major air terminals





## Products Division



Navy small craft using Boeing turbines set new operating standards with the fleet at home and abroad



New models of the turbine are suitable for small helicopters and executive aircraft



Over two years of experimental testing have been given to Boeing turbines in heavy earth-moving equipment





## Research

To keep pace with the continuously accelerating technologies of the aero-missile-space age, your company continues to expand its research facilities and personnel. Two general areas of research are pursued—basic research in the broad areas of science, and research directed toward product development and improvement.

A new building is nearing completion for the Boeing Scientific Research Laboratories. This organization was established two years ago as a part of the Headquarters organization, and operates independently of the divisions. The staff of



So that a man may go into space, and  
return safely, Boeing technicians test  
conditions—including vibration—a  
space traveler may meet







the Laboratories includes aerodynamicists, mathematicians, physical chemists, physicists and engineers with extensive experience in fundamental research. Fields of interest include new and important areas of energy conversion, hypersonics, magneto-hydrodynamics and plasma physics.

In addition the company maintains other extensive research facilities which are utilized primarily toward product improvement. These include a complex of wind tunnels, the most comprehensive in private industry. The newest tunnel, nearly ready for operational use at year-end, extends aerodynamic testing capabilities through all airspeed ranges from subsonic to satellite speeds.

Each of the divisions carries on research applicable to improvement of its products. Such research may embrace support for advanced prototype and component development and testing. The laboratories provide facilities for varied research ranging from structures, propulsion, dynamics, equipment and flight test to materials, metals, processes, instrumentation, acoustics, space medicine and human factors. Included are supporting analog and digital computing, data processing and calibration facilities.

A majority of divisional laboratories also are used to provide research and test services to other divisions, either on a continuous or demand basis. This assures efficient company-wide utilization. Laboratories and test installations are backed by on-premise shops. Experimental manufacturing facilities supply unusual and long flow items.





Using Vertol Model 107 helicopters, New York Airways expects to carry 500,000 passengers annually

## Vertol Acquisition

A step toward diversification within the company's existing product fields was taken late in 1959 when the management of Boeing and of Vertol Aircraft Corporation developed plans for acquisition of Vertol by Boeing. As discussed previously in the report, the Board of Directors of each company and Vertol stockholders have agreed to the plan of acquisition which contemplates completion of the transaction by March 31, 1960. This plan provides for the issuance of 448,729 shares of Boeing capital stock in exchange for substantially all of the assets of Vertol and the company agrees to assume substantially all of the liabilities and obligations of Vertol.

Vertol, with its principal factory at Morton, Pennsylvania, has approximately 2300 employees and specializes in development and production of helicopters. It has flying an experimental, tilting VTOL aircraft, and has also done experimental work in the ground cushion effect field.

Vertol helicopters have been sold to the three military services, foreign nations and to

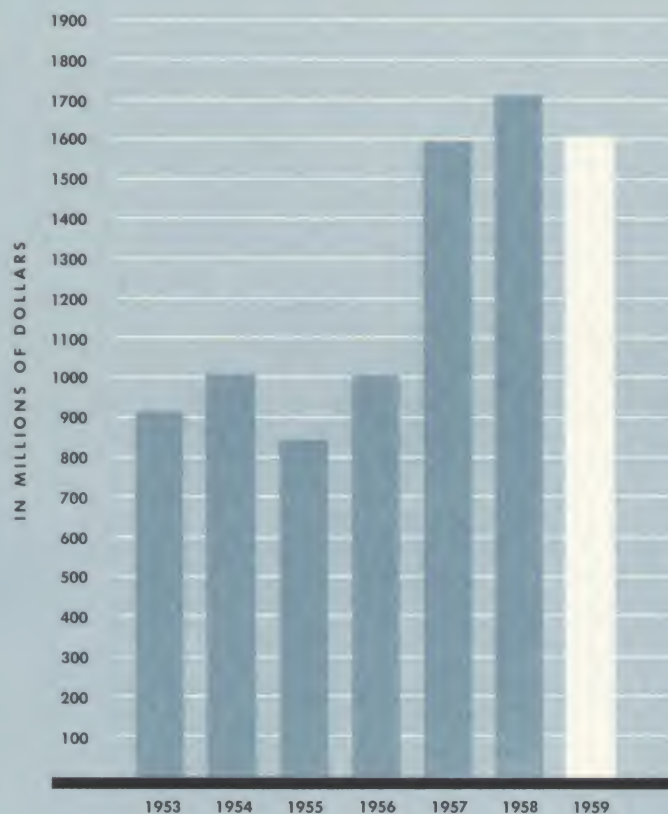
New York Airways. The latter recently placed an order for an additional 5 Vertol 107 Model II helicopters, with an option for five more. Boeing management believes Vertol has strong capabilities both in helicopter design and in other areas of the V/STOL fields.

In addition to its operations at Morton, Vertol has two wholly-owned subsidiaries: Allied Research Associates, Inc., of Boston, and Canadian Vertol Aircraft, Ltd., of Arnprior, Ontario, Canada. Allied Research Associates is a small applied research organization engaged in the study of fundamental problems in advanced fields of technology, including missiles, space flight and nuclear weapons effects. The Canadian subsidiary is concerned primarily with the overhaul, modification and field service support of Vertol helicopter operators in Canada.

Announced plans contemplate continuation of Vertol's present management at its existing location as the Vertol Division of Boeing, with subsidiaries remaining as separate corporations, subsidiary to Boeing.



**Sales**  
1953-1959



## Financial Review

Sales for the year 1959 totaled \$1,612,152,754, as compared to \$1,711,929,576 for 1958. Military sales accounted for \$1,207,723,000 of the total—a decline of approximately \$461,334,000 from the 1958 level. The decline was offset to a large extent by the sales applicable to the 76 commercial airplanes delivered during the year.

Net earnings for 1959 after taxes on income were \$12,435,754, or 0.77 cents per dollar of sales, as compared to the \$29,360,013 or 1.72 cents per dollar of sales reported in 1958. Net earnings equaled \$1.65 per share as compared to the \$3.93 per share (adjusted for the 2% stock dividend issued December 17, 1959) for the previous year.

The transition of the B-52G and Bomarc production programs from a cost reimbursement contract basis to a fixed price contract basis was the principal reason for the decline in military sales. Under cost reimbursement contracts, it is the company's policy to record sales as costs are incurred, whereas under fixed price contracts, sales are recorded as deliveries are made. Although activity on the B-52 and Bomarc programs continued at a high level throughout 1959, a substantial part of the effort was not translated into sales until deliveries under fixed price contracts commenced in the latter half of



the year. The programmed reduction in the production rate of B-52 and KC-135 airplanes during the year also contributed to the decline in military sales.

Reduced earnings during the year resulted from the decline in sales volume on military contracts and continued heavy charges applicable to the commercial jet transport program. Commercial airplane costs charged to earnings in 1959 totaled \$58,000,000. This amount related to the research, developmental, administrative and other general expenses which were written off during the year and the amount necessary to reduce commercial program inventories at December 31, 1959, to estimated proportionate sales value.

The engineering, tooling, and manufacturing process changes required by the incorporation of the design improvements discussed in the Transport Division Section of this report result in substantial additional costs against the overall commercial program. Such costs not only resulted in fourth quarter earnings for 1959 being lower than previously anticipated but will also affect 1960 earnings.

### The Year Ahead

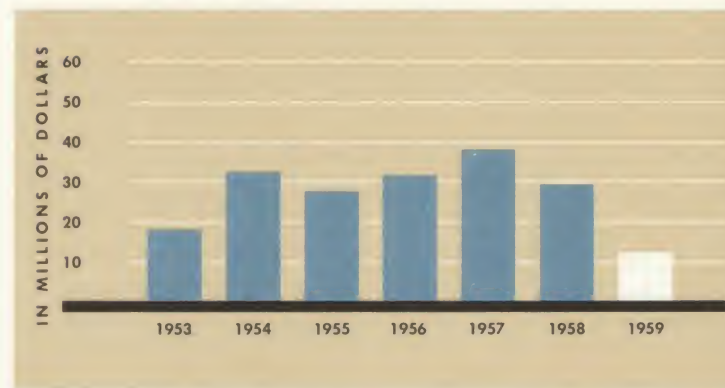
Based upon current programs and schedules, sales for 1960 will continue at a relatively high level, but most likely will be somewhat lower than 1959. Substantial deliveries under the B-52 and KC-135 programs are scheduled during the year, although at reduced rates. Deliveries of missiles and bases under the Bomarc program are scheduled for continued build-up throughout the year, and production activity on both the Minuteman and Dyna-Soar programs should accelerate substantially.

Earnings in 1960 are expected to improve over those for 1959, the degree of improvement being dependent on further developments on the commercial program. Future earnings will be influenced by such factors as quantity of orders,

model of airplane ordered, and the costs necessary to incorporate state of the art changes that are required to keep our product competitive. Another most important factor affecting earnings relates to the competition with respect to financial terms; namely, basic sales price, trade-ins of used equipment, and payment provisions.

In addition, as indicated earlier, the company is engaged in studies for "growth" improve-

**Net Earnings**  
1953-1959



ment of existing models and studies on a shorter range jet transport, and has offered an all-cargo jet liner, Model 735, to the airlines. To the extent that these programs develop, research, developmental, administrative and general expenses applicable thereto will be charged against earnings as they are incurred.

Unfilled orders at year-end totaled \$2,000,000,000. Letter contracts with the government on which agreement as to price has not been reached with the procuring agency are included only to the extent of the funds which have been allocated thereto. When contracts currently under negotiation are definitized, orders will be increased by approximately \$700,000,000. As of December 31, 1959, fixed price and cost reimbursement contracts containing incentive pro-



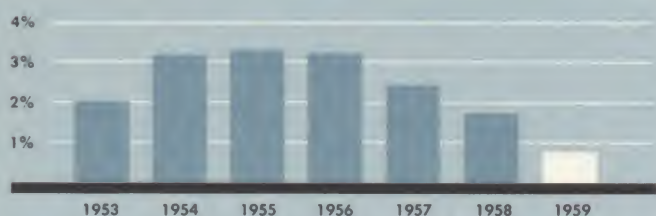
visions accounted for approximately 91% of government orders.

Included in the backlog at year-end were orders for missiles totaling \$692,000,000. At December 31, the backlog of 707/720 jet transport program totaled \$585,000,000, representing orders for 68 Model 707 aircraft and 46 Model 720s, together with fan engine conversion kits and spares.

Orders for four 720s and one 707 by Luft-hansa, one 707 by Air India and three 720s by Western Airlines, which were received subsequent to December 31, are not included in the backlog. During the year Cubana Airlines advised that it would be unable to accept delivery of the two Model 707 airplanes it had ordered. These airplanes, upon which the company is protected by substantial advance payments, are being leased to Western Airlines.

#### Per Cent of Net Earnings to Sales

1953-1959



#### Plant and Equipment

During 1959, expenditures for facilities totaled \$17,515,758, increasing the gross investment in property, plant, and equipment at year-end to \$161,929,853. Included in this investment were facilities still in use with an original cost of \$21,963,374 which had been fully depreciated or amortized at December 31, 1959.

Since 1949, certificates of necessity have been received on facilities costing \$77,584,317.

The certified portion of these facilities, totaling \$49,678,367, has been or is being amortized over 60-month periods.

Depreciation and amortization in the amount of \$19,121,328 was recorded during the year, including \$4,336,661 of amortization in excess of normal depreciation. A portion of the amortization in excess of normal depreciation applicable to certain capital asset items is included as a cost under military contracts. Net investment in property, plant, and equipment at year-end was \$78,020,928, a decrease of \$1,667,489 from the end of 1958.

The need for additional facilities will continue to require substantial expenditures of company funds. Such investment is required for additional facilities to support new programs such as Minuteman and Dyna-Soar and to provide capability for keeping abreast of the state of the art from both a research and manufacturing standpoint.

#### Renegotiation

In January, 1960, the company received a "Clearance Notice" from the Los Angeles Regional Renegotiation Board relative to renegotiation proceedings for the year 1956. The determination that no excessive profits were realized during 1956 from government contracts and sub-contracts was made by the Regional Board and concurred in by The Renegotiation Board, Washington, D. C. The "Clearance" for 1956 is the first the company has received since 1951.

As has been discussed in previous stockholders' reports, the company has pending in the Tax Court of the United States four petitions for redetermination of prior Renegotiation Board findings of excessive profits. The petitions relate to determinations of excessive profits for the years 1952, 1953, 1954, and 1955, and involve net refunds, after applicable federal and state income tax credits, totaling \$12,722,345. The required



refunds have been either paid or provided for in the accounts.

The hearing before the Tax Court with respect to the company's appeal for the year 1952 was held during the latter part of 1958 and in January, 1959. The trial was recessed pending the outcome of associated litigations, initiated by the company, involving the enforcement of subpoenas of certain records of the Renegotiation Board and the Secretary of the Air Force considered pertinent to the case. Hearings in this regard have been held in the United States District Court and the Court of Appeals for the District of Columbia with a decision currently pending in the latter court. Due to the delay caused by such proceedings, the Tax Court's decision in the 1952 case is not expected for some time. Trial dates have not been established by the Tax Court for the years 1953, 1954, and 1955.

Since your management believes that earnings for the years 1957, 1958, and 1959 were not excessive, no provision for renegotiation refunds has been made for these years.

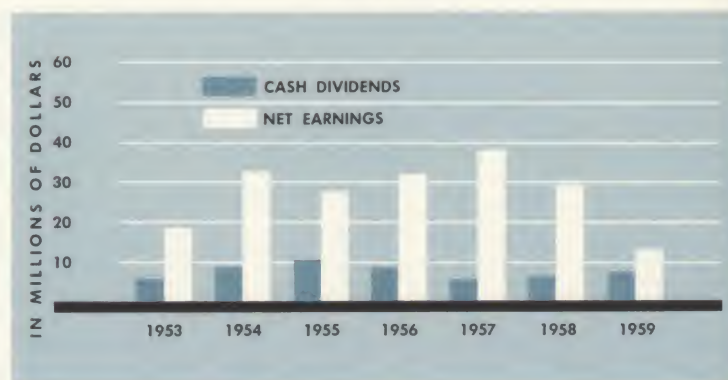
### Federal Income Tax

Federal income tax returns for all years through 1956 have been examined and agree-

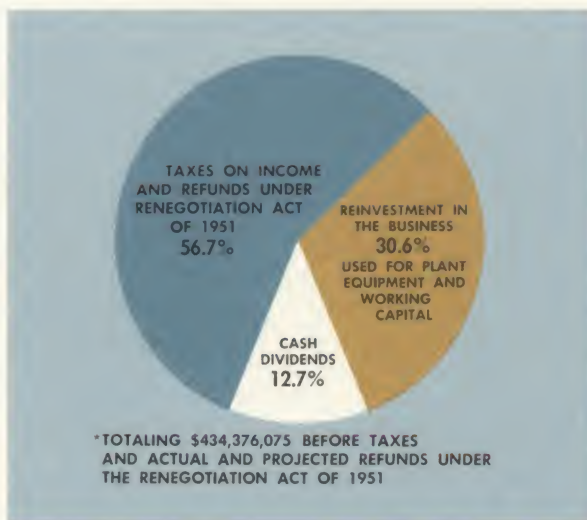
ments reached with the exception of certain claims for refunds, including a petition filed with the United States Court of Claims, which are pending. Such claims have not been recorded in the accounts.

The year 1957 is currently under examination by the Internal Revenue Service. The income tax liability stated on the Balance Sheet is believed adequate for all years for which agreements have not been reached.

**Cash Dividends and Net Earnings**  
1953-1959



**Disposition of Earnings\***  
1953-1959



### Dividends

Cash dividends totaling \$7,360,826 were paid during 1959. In addition, a 2% stock dividend was issued and distributed to stockholders of record on November 12, 1959. In connection with the 2% stock dividend, \$4,406,234 was transferred from the Retained Earnings account to the Capital Stock account.

### Working Capital

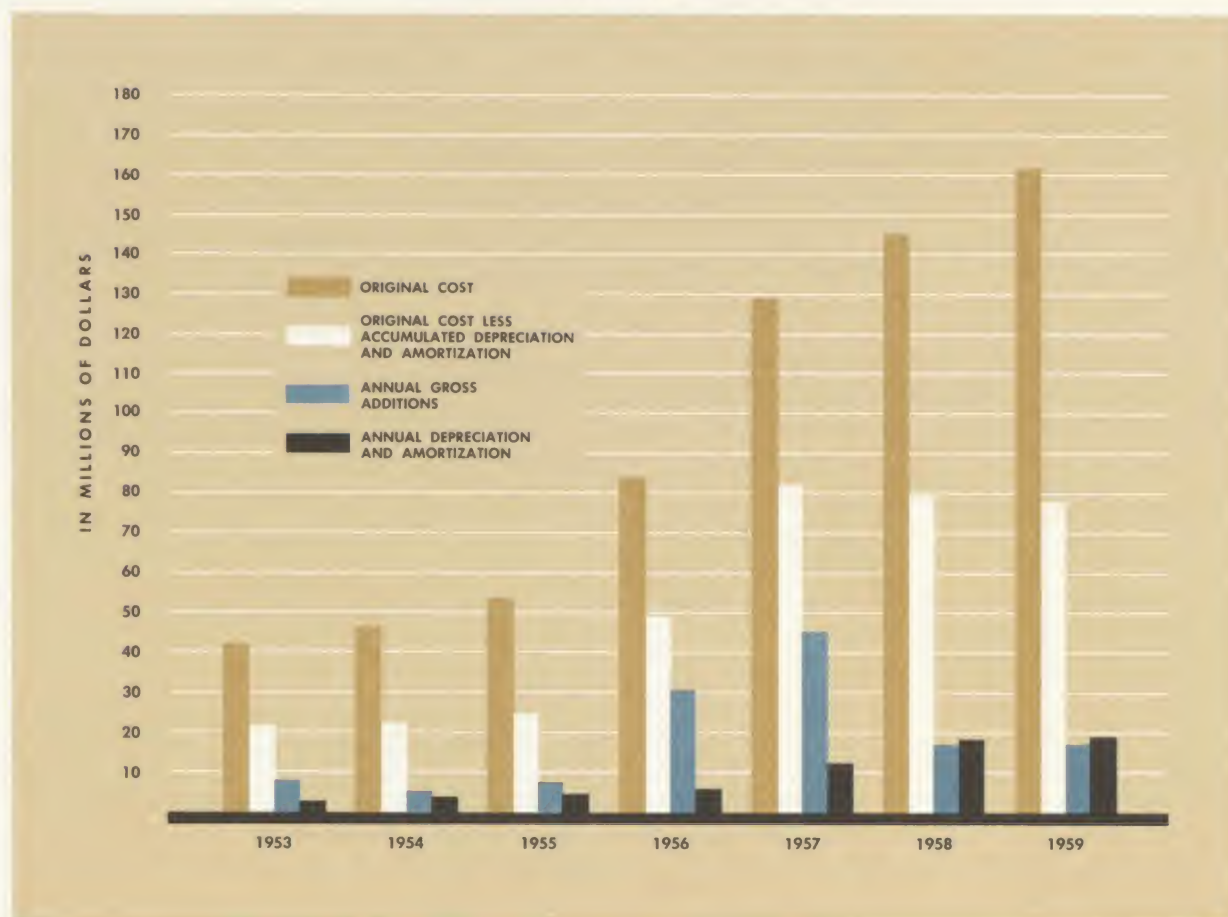
Working capital at the year-end amounted to \$199,389,650, an increase of \$9,071,789 during the year. The additional working capital was obtained from the following sources:



Retained earnings (net earnings for the year less cash dividends)	\$5,074,928
Excess of depreciation and amortization over facilities expenditures . . . . .	1,605,570
Stock sold to officers and employees under provisions of the incentive compensation plan . .	2,189,037
Other . . . . .	202,254
	<u>\$9,071,789</u>

During the year, the company reduced its open line of bank credit from \$200,000,000 to \$175,000,000. Borrowings under the company's credit line were required throughout the year and reached a peak of \$163,000,000 in March. At the end of the year, notes payable to banks totaled \$98,000,000, the same amount that was outstanding at the end of 1958. It is presently anticipated that the current credit line is adequate to meet all requirements during 1960.

**Company Investment in Property Plant, and Equipment**  
1953-1959







Under the lights on Renton airfield, KC-135 jet tanker-transport for the U. S. Air Force await test flight



On schedule or ahead, Boeing commercial jet airliners move through transport division assembly line

Boeing wind tunnels, including the hypersonic, form the world's largest private testing complex



# Looking to the Future

As has been frequently pointed out, we are engaged in a business marked by rapid change and technical advancement. This has never been more apparent than in the last four or five years, which have witnessed the emergence of a marked military interest in satellites, missiles of all types and space-exploration, and in the commercial field, the advent of the jet age.

Several factors of paramount importance to the company and its future have resulted from this evolution. No longer are military contracts likely to embrace large quantity production runs, as was the case with such programs as the B-17, B-29 and the B-47. Rather, current experience indicates that future contracts will involve substantially increased funds for research and engineering with a commensurate reduction in funds for production hardware.

The nature of competition has likewise changed radically, both in the military and commercial fields. No longer are we competing with other airframe manufacturers alone for military business. Automobile manufacturers, major electrical firms, and principals of the electronics industry, among others, are actively seeking important government contracts. The increased competition in the commercial field, both as to product performance and sales conditions, has been detailed in the Transport Division section.

Your management has taken a number of steps to prepare for the transitions which are taking place in the business. Creation of the Aero-Space Division, expansion of research facilities, careful exploration of areas for diversification and increased emphasis on marketing have been undertaken to put your company in an improved competitive position. That these efforts are meeting with success is evidenced by the

award to the company of a major participation in both the Minuteman and Dyna-Soar Programs.

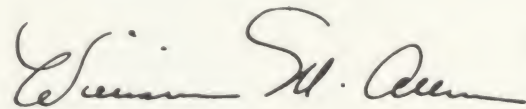
In addition to the Bomarc production program we are fortunate in having, during this period of transition, quantity production programs on the B-52 and KC-135. Both programs have the potential for continuation well into the 60's.

The B-52, KC-135 and other major military programs are reviewed in earlier sections of this report. We have a proved family of commercial jet transports which have made the Boeing name known throughout the world. An efficient jet cargo transport is being offered and detailed studies have been made of a short range commercial jet transport. Longer range planning includes a supersonic transport.

Acquisition of the Vertol company should establish Boeing in the helicopter and other phases of the vertical and short take-off length fields. The potential in these fields is applicable to both military and commercial markets.

We have a gas turbine program on which excellent progress is being made and which has a substantial growth potential.

Most importantly, we have a highly qualified and dedicated organization: an organization that possesses the skills—scientific, technical and administrative—necessary to success.



*President*

March 7, 1960



# Five Year Condensed Comparative Financial Data

Financial Position	As of December 31,	1959
Current assets.....		\$ 515,705,564
Current liabilities.....		316,315,914
Working capital.....		\$ 199,389,650
Property, plant and equipment, net.....		78,020,928
Unamortized debenture discount and expense.....		1,615,024
Total.....		\$ 279,025,602
Less: Long-term debt.....		70,545,000
Net assets.....		\$ 208,480,602
Represented by stockholders' investment in:		
Capital stock.....		\$ 119,945,754
Retained earnings.....		88,534,848
		\$ 208,480,602
Stockholders' equity per share.....		\$ 27.72
Ratio of current assets to current liabilities.....		1.63 to 1

## Sales, Earnings and Dividends

Sales.....	\$1,612,152,754
Earnings before taxes on income.....	25,835,754
Taxes on income.....	13,400,000
Net earnings.....	12,435,754
Cash dividends paid.....	7,360,826
Net earnings per share.....	1.65
Cash dividends paid per share.....	0.98
Income taxes per share.....	1.78
% earnings before taxes on income to sales.....	1.60%
% taxes on income to sales.....	0.83%
% net earnings to sales.....	0.77%

## General Information

Backlog.....	\$2,000,000,000
Number of authorized shares of common stock.....	10,000,000
Number of shares outstanding.....	7,521,911
Average number of employees.....	90,280
Total wages and salaries.....	\$ 563,747,207
Gross additions to plant and equipment.....	17,515,758
Depreciation and amortization.....	19,121,328
Amortization in excess of normal depreciation.....	4,336,661
Square feet of floor area:	
Government owned.....	11,682,730
Boeing owned.....	6,027,373
Leased.....	1,335,359

NOTE: Financial data restated to give effect to the actual renegotiation refunds for the years 1952, 1953, 1954 and 1955. All per share figures adjusted to reflect stock dividends and stock splits.



1958	1957	1956	1955
\$ 523,881,420	\$ 409,125,951	\$ 282,627,505	\$ 231,378,352
333,563,559	315,257,657	188,570,529	137,435,775
\$ 190,317,861	\$ 93,868,294	\$ 94,056,976	\$ 93,942,577
79,688,417	81,902,760	49,304,576	24,707,138
1,755,359			
\$ 271,761,637	\$ 175,771,054	\$ 143,361,552	\$ 118,649,715
70,546,500			
\$ 201,215,137	\$ 175,771,054	\$ 143,361,552	\$ 118,649,715
\$ 113,348,983	\$ 94,834,035	\$ 84,943,535	\$ 60,968,732
87,866,154	80,937,019	58,418,017	57,680,983
\$ 201,215,137	\$ 175,771,054	\$ 143,361,552	\$ 118,649,715
\$ 26.95	\$ 23.83	\$ 19.49	\$ 16.18
1.57 to 1	1.30 to 1	1.50 to 1	1.68 to 1

\$1,711,929,576	\$1,596,508,515	\$1,006,356,748	\$ 847,307,110
61,560,013	77,659,707	67,134,989	56,120,799
32,200,000	39,500,000	35,000,000	28,859,282
29,360,013	38,159,707	32,134,989	27,261,517
7,016,727	6,681,281	8,162,577	10,579,340
3.93	5.17	4.37	3.72
0.94	0.91	1.11	1.44
4.31	5.35	4.76	3.94
3.60%	4.86%	6.67%	6.62%
1.88%	2.47%	3.48%	3.41%
1.72%	2.39%	3.19%	3.22%

\$2,445,000,000	\$2,452,000,000	\$3,024,000,000	\$2,624,000,000
10,000,000	10,000,000	10,000,000	5,000,000
7,320,006	6,953,583	6,666,689½	3,258,125¾
92,878	94,998	71,106	65,366
\$ 548,720,343	\$ 511,749,258	\$ 373,918,888	\$ 319,791,241
16,782,060	45,043,425	30,847,605	7,521,100
18,737,833	12,422,205	6,237,686	4,925,358
4,778,072	3,449,737	2,129,116	1,940,577
11,660,042	11,228,294	9,381,243	8,593,841
5,712,011	5,571,913	3,796,105	3,769,664
1,659,727	1,843,422	1,854,955	1,516,666



# Balance Sheet

**BOEING AIRPLANE COMPANY**

**December 31, 1959**

## **ASSETS**

### **CURRENT ASSETS:**

Cash.....	\$ 48,955,853
Accounts receivable—United States Government contracts (including unreimbursed costs and fees under cost reimbursement type contracts of \$119,007,181).....	165,244,162
Other accounts and notes receivable.....	23,936,620
Inventories, less advances and progress payments of \$341,601,770	274,337,609
Prepaid expenses .....	<u>3,231,320</u>
TOTAL CURRENT ASSETS.....	\$515,705,564

### **PROPERTY, PLANT, AND EQUIPMENT, at cost:**

Land (\$3,687,341) and buildings.....	\$ 98,278,354
Machinery and equipment.....	<u>63,651,499</u>
	\$161,929,853
Less allowance for accumulated depreciation and amortization..	<u>83,908,925</u> 78,020,928
UNAMORTIZED DEBENTURE DISCOUNT AND EXPENSE	<u>1,615,024</u>
	<u><u>\$595,341,516</u></u>

## LIABILITIES AND STOCKHOLDERS' INVESTMENT

### CURRENT LIABILITIES:

Notes payable to banks .....	\$ 98,000,000	
Accounts payable .....	152,270,903	
Salaries and wages .....	42,051,202	
Payroll, property, and excise taxes .....	6,287,139	
Allowance for 1954 and 1955 renegotiation, net of taxes .....	7,767,850	
Federal taxes on income .....	9,938,820	
TOTAL CURRENT LIABILITIES .....		<u>\$316,315,914</u>

### LONG-TERM DEBT:

5% Sinking Fund Debentures .....	\$ 40,000,000	
4½% Convertible Subordinated Debentures .....	<u>30,545,000</u>	70,545,000

### STOCKHOLDERS' INVESTMENT:

Capital stock, par value \$5 a share—		
Authorized—10,000,000 shares (610,900 shares reserved for conversion of 4½% Convertible Subordinated Debentures)		
Issued and outstanding—7,521,911 shares at stated value .....	\$119,945,754	
Retained earnings (after transfer to the capital stock account of \$98,460,853) .....	<u>88,534,848</u>	<u>208,480,602</u>
		<u><u>\$595,341,516</u></u>

See notes to financial statements.



# Statement of Net Earnings

## BOEING AIRPLANE COMPANY

Year Ended December 31, 1959

Sales .....		\$1,612,152,754
Other income .....		<u>1,048,655</u>
		\$1,613,201,409
Costs and expenses .....	\$1,577,825,024	
Interest and debt expense .....	9,540,631	
Federal taxes on income .....	<u>13,400,000</u>	<u>1,600,765,655</u>
NET EARNINGS FOR THE YEAR .....		\$ 12,435,754
Adjustment of 1955 renegotiation refund, net of taxes .....		<u>379,894</u>
BALANCE TRANSFERRED TO RETAINED EARNINGS		<u><u>\$ 12,055,860</u></u>

Provision for depreciation and amortization for the year . . . . . \$19,121,328

See notes to financial statements.

## Notes to Financial Statements

### INVENTORIES:

Inventories are composed of:

Fixed price type contracts in process . . . . .	\$595,200,566
Commercial spare parts . . . . .	10,148,009
General stock materials . . . . .	<u>10,590,804</u>
	\$615,939,379
Less advances and progress payments . . . . .	<u>341,601,770</u>
	<u><u>\$274,337,609</u></u>

Military fixed price type contracts in process are stated at the total of direct costs and overhead applicable thereto, less the estimated average cost of deliveries based on the estimated total cost of the contracts. Work in process on commercial programs is stated in the same manner, except that applicable research, developmental, administrative, and other general expenses are charged directly to earnings as incurred.

To the extent that estimated total costs of units scheduled for production, determined in the above manner, are expected to be greater than total sales price, the portion of such excess related to work in process is currently charged to earnings. The resultant inventory is stated at estimated proportionate sales value.

Commercial spare parts and general stock materials are stated at average cost, not in excess of realizable value.

**RENEGOTIATION:** The Renegotiation Board has unilaterally determined that the company realized excessive profits for the years 1952 through 1955 and has issued a clearance for the year 1956. The required refunds have been paid or provided for in the accounts and appeals have been taken to the Tax Court of the United States.

The company cannot predict what the Board's actions will be for the years 1957, 1958, and 1959. In view of this uncertainty and the belief of the company that no excessive profits were realized, no provision has been made for renegotiation refunds for any of these years.

# Statement of Stockholders' Investment

## BOEING AIRPLANE COMPANY

Year Ended December 31, 1959

	Capital Stock		Retained Earnings
	Shares	Amount	
Balance at January 1, 1959 (after transfer from retained earnings to the capital stock account of \$94,054,619)	7,320,006	\$113,348,983	\$88,246,048
Net earnings for the year (\$12,435,754), less adjustment of 1955 renegotiation refund (\$379,894).....			12,055,860
Shares sold to officers and employees at market value under the Incentive Compensation Plan.....	54,386	2,189,037	
Stock dividend (2%)—Amount transferred by the Board of Directors equal to the approximate market value on declaration date.....	147,489	4,406,234	(4,406,234)
Cash dividends paid, \$1.00 a share.....			(7,360,826)
Shares issued in exchange for Convertible Subordinated Debentures.....	30	1,500	
Balance at December 31, 1959.....	<u>7,521,911</u>	<u>\$119,945,754</u>	<u>\$88,534,848</u>

See notes to financial statements.

**LONG-TERM DEBT AND RESTRICTIONS ON RETAINED EARNINGS:** Sinking fund requirements under the 5% Sinking Fund Debentures, due in 1978, are \$2,700,000 annually beginning in 1964.

The 4½% Convertible Subordinated Debentures, due in 1980, are convertible at two shares for each \$100 principal amount. The annual sinking fund requirements beginning in 1968 amount to \$1,750,000 less credits for previously converted debentures.

The Indentures under which the debentures were issued place various restrictions on the use of retained earnings for the payment of cash dividends or acquisition of the company's capital stock or subordinated indebtedness. At December 31, 1959, the amount of retained earnings restricted under these indentures was \$49,006,938.

**STOCK OPTIONS AND INCENTIVE COMPENSATION:** At December 31, 1959, options for 35,598 shares at \$47.92 (as adjusted for 1959 stock dividend) and 71,000 shares at \$30.50 were outstanding. None of the options were exercisable at that date. An additional

105,562 shares are available for future grants under the restricted stock option plan.

Incentive compensation provided for the year 1959 was \$1,400,000.

**RETIREMENT PLAN:** Under the company's non-contributory retirement plan, a charge of \$13,561,140 has been made in the accounts for the year 1959, of which \$11,925,653 represents current service and \$1,635,487 is applicable to past service. At December 31, 1959, the past service liability not recognized in the accounts was estimated at \$10,175,000.

**VERTOL ACQUISITION:** The Boards of Directors of the company and of Vertol Aircraft Corporation adopted a plan of agreement and reorganization, which was approved by the stockholders of Vertol on February 15, 1960. This plan provides for the issuance of 448,729 shares of Boeing capital stock in exchange for substantially all of the assets of Vertol. The company agrees to assume substantially all of the liabilities and obligations of Vertol. It is expected that the closing date will be March 31, 1960.



## Accountants' Report

### TOUCHE, ROSS, BAILEY & SMART CERTIFIED PUBLIC ACCOUNTANTS

1411 FOURTH AVENUE  
SEATTLE 1, WASHINGTON

March 7, 1960

Board of Directors  
Boeing Airplane Company  
Seattle, Washington

We have examined the accompanying balance sheet of Boeing Airplane Company as of December 31, 1959 and the related statements of net earnings and stockholders' investment for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We were unable to obtain satisfactory confirmations of receivables from the United States by direct communication, but we satisfied ourselves as to such accounts by other auditing procedures.

In our opinion, subject to the effect of renegotiation refunds, if any, that may be required for years subsequent to 1956, the financial statements referred to above present fairly the financial position of Boeing Airplane Company at December 31, 1959 and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Also, in our opinion, the action of the Board of Directors on March 7, 1960, in setting aside the sum of \$1,400,000 for the year 1959 under the Incentive Compensation Plan for Officers and Employees, is in conformity with the provisions contained in the first paragraph of Section 2 of such plan.

*Touche, Ross, Bailey & Smart*

Certified Public Accountants

#### General Counsel

HOLMAN, MICKELWAIT, MARION, BLACK & PERKINS

#### General Auditors

TOUCHE, ROSS, BAILEY & SMART

#### Transfer Agent

FIRST NATIONAL CITY TRUST COMPANY, NEW YORK CITY

#### Registrar

THE FIRST NATIONAL CITY BANK OF NEW YORK, NEW YORK CITY

**BOEING AIRPLANE COMPANY**

GENERAL OFFICES • 7755 EAST MARGINAL WAY • SEATTLE 24, WASHINGTON







## OFFICERS

WILLIAM M. ALLEN — President  
C. L. EGTVEDT — Chairman  
J. E. SCHAEFER — Vice Chairman  
WELLWOOD E. BEALL — Senior Vice President  
EDWARD C. WELLS — Vice President — Engineering  
J. E. PRINCE — Vice President — Administration and Secretary  
FRED P. LAUDAN — Vice President — Manufacturing  
GEORGE S. SCHAIRER — Vice President — Research and Development  
A. F. LOGAN — Vice President — Labor Relations  
N. D. SHOWALTER — Vice President  
JAMES P. MURRAY — Vice President  
EVAN M. NELSEN — Treasurer  
H. W. HAYNES — Controller  
C. B. GRACEY — Vice President — General Manager, Wichita Division  
LYSLE A. WOOD — Vice President — General Manager, Aero-Space Division  
J. O. YEASTING — Vice President — General Manager, Transport Division  
J. B. CONNELLY — Vice President — Assistant General Manager, Transport Division  
T. E. GAMLEM — Vice President — Assistant General Manager, Transport Division  
GEORGE C. MARTIN — Vice President — Assistant General Manager, Aero-Space Division  
ROBERT H. JEWETT — Vice President — Assistant General Manager, Aero-Space Division

## DIRECTORS

WILLIAM M. ALLEN — President  
WELLWOOD E. BEALL — Senior Vice President  
DARRAH CORBET — President, Smith Cannery Machines Company, Seattle  
C. L. EGTVEDT — Chairman  
D. A. FORWARD — Retired Vice Chairman, The First National City Bank of New York  
ARTEMUS L. GATES — Consultant, New York City  
FRED P. LAUDAN — Vice President — Manufacturing  
PAUL PIGOTT — President, Pacific Car and Foundry Company, Renton  
WILLIAM G. REED — Chairman, Simpson Timber Company, Seattle  
J. E. SCHAEFER — Vice Chairman  
DIETRICH SCHMITZ — Chairman, Washington Mutual Savings Bank, Seattle  
EDWARD C. WELLS — Vice President — Engineering  
J. O. YEASTING — Vice President — General Manager, Transport Division



